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## NOTICE OF ALLOWANCE AND FEE(S) DUE

51344 7590 02/09/2009

BROOKS KUSHMAN P.C. / SUN / STK  
1000 TOWN CENTER, TWENTY-SECOND FLOOR  
SOUTHFIELD, MI 48075-1238

EXAMINER

SHAN, APRIL YING

ART UNIT

PAPER NUMBER

2435

DATE MAILED: 02/09/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/784,587

02/23/2004

Kevin G. Osborn

SUNM 040577 PUS

9651

TITLE OF INVENTION: SYSTEM AND METHOD FOR IDENTIFYING MESSAGE PROPAGATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	05/11/2009

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
Commissioner for Patents  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

**Note:** A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

51344 7590 02/09/2009

**BROOKS KUSHMAN P.C. / SUN / STK  
1000 TOWN CENTER, TWENTY-SECOND FLOOR  
SOUTHFIELD, MI 48075-1238**

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,587	02/23/2004	Kevin G. Osborn	SUNM 040577 PUS	9651

**TITLE OF INVENTION: SYSTEM AND METHOD FOR IDENTIFYING MESSAGE PROPAGATION**

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	05/11/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
SHAN, APRIL YING	2435	713-176000

**1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).**

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

**2. For printing on the patent front page, list**

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

**3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)**

**PLEASE NOTE:** Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

**4a. The following fee(s) are submitted:**

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

**4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)**

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

**5. Change in Entity Status (from status indicated above)**

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

**NOTE:** The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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BROOKS KUSHMAN P.C. / SUN / STK  
1000 TOWN CENTER, TWENTY-SECOND FLOOR  
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## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 773 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 773 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/784,587	OSBORN, KEVIN G.	
	<b>Examiner</b>	<b>Art Unit</b>	
	APRIL Y. SHAN	2435	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 21 November 2008.
2. ☒ The allowed claim(s) is/are 1-4,7-9,13,14,30 and 33.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
|---|---|

### DETAILED ACTION

1. The Applicant's amendment, filed 21 November 2008, has been received and entered into the record, respectfully and carefully considered.
2. As a result of the amendment, claims 6, 15-29, 31-32 and 34 are canceled. Therefore, claims 1-5, 7-14, 30 and 33 have been examined.

### ***Claim Rejections - 35 USC § 101***

3. As a result of canceling claims 17-21, 23-29 and 32, the examiner withdraws the pending 101 rejections to claims 17-21, 23-29 and 32.

### EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. Authorization for this examiner's amendment was given in a telephone interview with Mr. Jeremy Curcuri (Registration No. 42,454) on 14 January 2009 and 23 January 2009. The amendment is to overcome minor informalities and to further clarify the invention. As per MPEP 713.04, a separate interview summary form is not provided because the content of the interview has been summarized herein.

The application has been amended as follows:

### IN THE CLAIMS:

- Please **cancel claims 5, 10, 11 and 12**
- Please **amend claims 1, 13 and 30** as below:

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**(Claim 1)** (Currently Amended) A method of tracking incoming transmissions comprising:

identifying an incoming transmission including at least one identifiable portion;

computing, for each identifiable portion in the incoming transmission, a fingerprint indicative of the at least one identified portion, the fingerprint being substantially unique to the at least one identified portion;

storing the computed fingerprint to generate a set of stored fingerprints in a hardware implemented mail server;

receiving at the hardware implemented mail server a set of comparison fingerprints corresponding to a known portion of the incoming transmission, the set of comparison fingerprints being predetermined;

comparing at the hardware implemented mail server the set of stored fingerprints to the set of comparison fingerprints to identify stored fingerprints matching at least one of the set of comparison fingerprints and, if a match is found, identifying a previous incoming transmission corresponding to a matching stored fingerprint of the set of stored fingerprints;

storing an indication of a subsequent disposition of the incoming transmission in the hardware implemented mail server;

receiving at the hardware implemented mail server a subsequent set of comparison fingerprints, the subsequent set of comparison fingerprints indicative of refinements to the known portion of the incoming transmission;

matching the subsequent set of comparison fingerprints to the stored fingerprints at the hardware implemented mail server;

determining, based on the matching of the subsequent set of comparison fingerprints, if the subsequent set of comparison fingerprints is indicative of an undesirable portion in the incoming transmission at the hardware implemented mail server; and

selectively performing, based on the determining, a remedial action in response to the subsequent disposition at the hardware implemented mail server;

wherein the set of comparison fingerprints are virus signatures computed from known undesirable transactions;

demarcating the incoming transmission into segments at the hardware implemented mail server, each segment operable to yield a fingerprint, wherein the comparing further comprises

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comparing each value in the set of comparison fingerprints with at least one of the segments at the hardware implemented mail server;

identifying a segment type of each segment, the segment type corresponding to the content included in the segment;

categorizing each of the segments according to a heuristic, the heuristic indicative of a likelihood of the categorized segment including an undesirable transmission;

identifying a risk assessment of each of the segment types; and

storing the segment according to the identified risk assessment, storing further including identifying a duration.

**(Claim 13)** (Currently Amended) The method of claim [[12]] 1 wherein storing the segments further comprises storing the content of the segment with the corresponding fingerprint.

**(Claim 30)** (Currently Amended) ~~A computer program product having a computer readable medium operable to store computer program logic embodied in computer program code encoded thereon for tracking incoming transmissions comprising:~~

A computer program stored in a computer readable storage medium to execute a method of tracking incoming transmissions, said method comprising the steps of:

~~computer program code for~~ identifying an incoming transmission including at least one identifiable portion;

~~computer program code for~~ computing, for each identifiable portion in the incoming transmission, a fingerprint indicative of the at least one identified portion, the fingerprint being substantially unique to the at least one identified portion;

~~computer program code for~~ storing the computer fingerprint to generate a set of stored fingerprints;

~~computer program code for~~ receiving a set of comparison fingerprints corresponding to known portion of the incoming transmission, the set of comparison fingerprints being predetermined;

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~~computer program code for~~ comparing the set of stored fingerprints to the set of comparison fingerprints to identify stored fingerprints matching any of the set of comparison fingerprints and, if a match is found, identifying a previously received incoming transmission corresponding to a matching stored fingerprint of the set of stored fingerprints;

~~computer program code for~~ storing an indication of a subsequent disposition of the incoming transmission;

~~computer program code for~~ receiving a subsequent set of comparison fingerprints, the subsequent set of comparison fingerprints indicative of refinements to the known portion of the incoming transmission;

~~computer program code for~~ matching the subsequent set of comparison fingerprints to the stored fingerprints;

~~computer program code for~~ determining, based on the matching of the subsequent set of comparison fingerprints, if the subsequent set of comparison fingerprints is indicative of an undesirable portion in the incoming transmission; ~~and~~

~~computer program code for~~ selectively performing, based on the determining, a remedial action in response to the subsequent disposition;

wherein the set of comparison fingerprints are virus signatures computed from known undesirable transactions;

demarcating the incoming transmission into segments, each segment operable to yield a fingerprint, wherein comparing further comprises comparing each value in the set of comparison fingerprints with at least one of the segments;

identifying a segment type of each segment, the segment type corresponding to the content included in the segment;

categorizing each of the segments according to a heuristic, the heuristic indicative of a likelihood of the categorized segment including an undesirable transmission;

identifying a risk assessment of each of the segment types; and

storing the segment according to the identified risk assessment, storing further including identifying a duration.



***Reason for Allowance***

5. The following is the Examiner's statement of reasons for allowance:

The prior art does not teach the limitations in independent claims 1 and 30. The closest prior art fails to disclose wherein the set of comparison fingerprints are virus signatures computed from known undesirable transactions, demarcating the incoming transmission into segments, each segment operable to yield a fingerprint, wherein comparing further comprises comparing each value in the set of comparison fingerprints with at least one of the segments, identifying a segment type of each segment, the segment type corresponding to the content included in the segment; categorizing each of the segments according to a heuristic, the heuristic indicative of a likelihood of the categorized segment including an undesirable transmission; identifying a risk assessment of each of the segment types; storing the segment according to the identified risk assessment, storing further including identifying a duration and in combination with all other claim limitations in the claims.

The examiner further notes in pages 4-6 of the original disclosure, the Applicant discloses "A mail server stores...The mail server subsequently receives...The mail server comparing...the mail server receives...The mail server demarcates...The invention...implemented on a computer having a processor, memory, and interface operable for the performing the steps and methods...as disclosed herein...computerized device such as...central processing unit, microprocessor... or other hardware device configured to process all the of the method operations disclosed herein". A new limitation of "in/at the hardware implemented mail server" is added to claim 1 in the above authorized examiner's amendment based on the above cited passage from the original disclosure. Therefore, claims 1-4, 7-9, 13-14 and 33 have a specific machine tied in the method claims and they are statutory.

Furthermore, the examiner notes in the amendment to the specification submitted 06 December 2007, in which the Applicant **deletes** "or c) information conveyed to a computer through

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communication media, for example using baseband signaling or broadband signaling technique, as in an electronic network such as the Internet or telephone modem lines. The operations and methods maybe implemented in a software executable object or as a set of instructions embedded in a carrier wave" from page 16 of the original disclosure. Thus, the examiner takes the act of deleting as a disavowal. Additionally, on page 16 of the original disclosure, the Applicant discloses "ROM devices...floppy disks...CDs...RAM devices...". It is clear that to an ordinary skill in the art ROM devices, floppy disks, CD and RAM devices are computer readable storage medium. Therefore, claim 30 is statutory.

***Allowable Subject Matter***

6. Claims 1-4, 7-9, 13-14, 30 and 33 are allowed.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to APRIL Y. SHAN whose telephone number is (571)270-1014. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/April Y Shan/  
Examiner, Art Unit 2435  
/Kimyen Vu/  
Supervisory Patent Examiner, Art Unit 2435